

WHAT IS CLAIMED IS:

1. A method for making a closure having a body, a lid, and a hinge connecting said body and lid, said method comprising the steps of:

5 (A) providing a first mold part having (1) a first surface region defining a first side of said body, (2) a second surface region defining a first side of said hinge, and (3) a third surface region defining a first side of said lid;

10 (B) at a location spaced from said first mold part, providing a second mold part having (1) a first surface region defining a second side of said body, (2) a second surface region defining a second side of said hinge, and (3) a third surface region defining a second side of said lid;

(C) creating from a melt of thermoplastic material a billet having a predetermined shape;

15 (D) positioning said billet in a predetermined orientation with at least a portion of said billet disposed adjacent said first mold part second surface region;

(E) decreasing the space between said first and second mold parts to compress said billet so that said thermoplastic material flows between said mold parts; and

20 (F) after said thermoplastic material has solidified to form a closure, increasing the space between said mold parts, and then removing said closure.

25 2. The method in accordance with claim 1 in which said step (D) includes placing at least a portion of said billet against said first mold part second surface region.

3. The method in accordance with claim 2 in which said step (A) includes orienting said first mold part so that said first mold part first,

second, and third surface regions face generally away from the direction of the earth's gravitational force; and

said step (D) includes positioning said billet directly on said first mold part so that at least a portion of said billet is supported by said first mold part second surface region.

4. The method in accordance with claim 1 in which step (C) includes creating said billet to have a generally egg shape with a large end and a small end.

5. The method in accordance with claim 4 in which step (D) includes positioning said billet with said small end adjacent and sagging toward said first mold part third surface region, and with said large end adjacent and sagging toward said first mold part first surface region.

6. The method accordance with claim 1 in which step (C) includes extruding said melt through a generally oval shape exit orifice.

7. A method for making an article of unitary construction having a first portion, a second portion smaller than said first portion, and a third portion that is larger than said second portion, said method comprising the steps of:

(A) providing a first mold part having (1) a first surface region defining a first side of said first portion, (2) a second surface region defining a first side of said second portion, and (3) a third surface region defining a first side of said third portion;

(B) at a location spaced from said first mold part, providing a second mold part having (1) a first surface region defining a second side of said first portion, (2) a second surface region defining a second side of said

second portion, and (3) a third surface region defining a second side of said third portion;

(C) creating from a melt of thermoplastic material a billet having a predetermined shape;

5 (D) positioning said billet in a predetermined orientation with at least a portion of said billet disposed adjacent said first mold part second surface region;

(E) decreasing the space between said first and second mold parts to compress said billet so that said thermoplastic material flows
10 between said mold parts; and

(F) after said thermoplastic material has solidified to form an article, increasing the space between said mold parts, and then removing said article.

15 8. The method in accordance with claim 7 in which said step (D) includes placing at least a portion of said billet against said first mold part second surface region.

9. The method in accordance with claim 8 in which
20 said step (A) includes orienting said first mold part so that said first mold part first, second, and third surface regions face generally away from the direction of the earth's gravitational force; and

said step (D) includes positioning said billet directly on said first mold part so that at least a portion of said billet is supported by said first
25 mold part second surface region.

10. The method in accordance with claim 7 in which step (C) includes creating said billet to have a generally egg shape with a large end and a small end.

30

10036761-12104

11. The method in accordance with claim 10 in which step (D) includes positioning said billet with said small end adjacent and sagging toward said first mold part third surface region, and with said large end adjacent and sagging toward said first mold part first surface region.

5

12. The method accordance with claim 7 in which step (C) includes extruding said melt through a generally oval shape exit orifice.

13. A closure having a unitary construction of components which includes a body, a lid, and a hinge connecting said body and lid, said closure made by the method of comprising the steps of:

10

(A) providing a first mold part having (1) a first surface region defining a first side of said body, (2) a second surface region defining a first side of said hinge, and (3) a third surface region defining a first side of said lid;

15

(B) at a location spaced from said first mold part, providing a second mold part having (1) a first surface region defining a second side of said body, (2) a second surface region defining a second side of said hinge, and (3) a third surface region defining a second side of said lid;

20

(C) creating from a melt of thermoplastic material a billet having a predetermined shape;

(D) positioning said billet in a predetermined orientation with at least a portion of said billet disposed adjacent said first mold part second surface region;

25

(E) decreasing the space between said first and second mold parts to compress said billet so that said thermoplastic material flows between said mold parts; and

(F) after said thermoplastic material has solidified to form a closure, increasing the space between said mold parts, and then removing said article.

30

14. An article of unitary construction which includes a first portion, a second portion smaller than said first portion, and a third portion that is larger than said second portion, said article made by the method of comprising the steps of:

5 (A) providing a first mold part having (1) a first surface region defining a first side of said first portion, (2) a second surface region defining a first side of said second portion, and (3) a third surface region defining a first side of said third portion;

10 (B) at a location spaced from said first mold part, providing a second mold part having (1) a first surface region defining a second side of said first portion, (2) a second surface region defining a second side of said second portion, and (3) a third surface region defining a second side of said third portion;

15 (C) creating from a melt of thermoplastic material a billet having a predetermined shape;

(D) positioning said billet in a predetermined orientation with at least a portion of said billet disposed adjacent said first mold part second surface region;

20 (E) decreasing the space between said first and second mold parts to compress said billet so that said thermoplastic material flows between said mold parts; and

(F) after said thermoplastic material has solidified to form an article, increasing the space between said mold parts, and then removing said article.

25 15. A billet for compression molding comprising: a mass of thermoplastic material having a shape with at least one large end and a smaller region.

16. The billet in accordance with claim 15 in which said mass has a generally egg shape.

17. The billet in accordance with claim 15 in which said smaller
5 region in an elongate portion and said one large end has a generally bone end shape.

18. A billet made by the method comprising the following steps:
extruding a melt of thermoplastic material through an exit orifice
10 having a generally oval plan shape to form a predetermined mass of extruded thermoplastic material extending beyond said orifice;
permitting said mass to bulge peripherally; and
severing said mass from said exit orifice to form an egg shape billet.

19. A method for making a billet comprising the steps of:
extruding a melt of thermoplastic material through an exit orifice
15 having a generally oval plan shape to form a predetermined mass of extruded thermoplastic material extending beyond said orifice;
permitting said mass to bulge peripherally; and
20 severing said mass from said exit orifice to form an egg shaped billet.

20. A billet made by the method comprising the following steps:
extruding a melt of thermoplastic material through an exit orifice
having a plan shape with at least one large end and a smaller region to form
25 a predetermined mass of extruded thermoplastic material extending beyond said orifice;
permitting said mass to bulge peripherally; and
severing said mass from said exit orifice to form an elongate billet.

21. A method for making a billet comprising the steps of:

extruding a melt of thermoplastic material through an exit orifice

having a plan shape with at least one large end and a smaller region to form
a predetermined mass of extruded thermoplastic material extending beyond

5 said orifice;

permitting said mass to bulge peripherally; and

severing said mass from said exit orifice to form an elongate billet.

10036764.122101